PROTOCOL FOR WORK WITHIN CEILING SPACES WHICH ARE CONTAMINATED WITH ASBESTOS CONTAINING MATERIAL

The following instructions outline the procedure to be utilized whenever an individual at a Port Authority facility must, for any reason, enter a ceiling space which is contaminated with asbestos containing material.

A. Everyone within the regulated area of asbestos contamination shall utilize respirators as required by 29 CFR 1926.1101. Personal air monitoring must comply with OSHA 29 CFR 1926.1101. Prior to the start of work, each area must be demarcated using proper caution label signs to minimize the number of persons outside the area from exposure.

B. A portable framed containment chamber curtained with 2 layers of 6 mil thick polyethylene on the walls and floor overlapped to minimize seams. The exterior wall poly should extend to the ceiling and be taped using a high quality duct tape.

C. Once the integrity of the chamber is established, a small hole should be cut in the poly to allow for a high efficiency vacuum nozzle to filter the airborne particulate generated within the chamber.

D. Connect HEPA vacuum to a power source and assemble needed attachments.

E. Set out hand tools and disposable cloths.

F. Mix and pour amended water into a Hudson or hand sprayer. Fill second Hudson or hand sprayer with plain water.

G. Don personal protective equipment; double tyvek suits must be worn.

H. Ceiling tiles may only be disturbed by personnel in full protective equipment.

I. Depending upon the type of ceiling construction, the following steps should be employed:

1) Hatch door openings.
   - HEPA vacuum exterior of hatch door concentrating on the seams.
   - Carefully loosen support screws and slowly, gently, open hatch door with HEPA vacuum in close proximity and continued use. Vacuum entire top surface of hatch door as it becomes fully exposed.
   - Once fully open, mist the door's top surface with amended water and wipe clean.
   - HEPA vacuum the perimeter of the hatch within the ceiling of the work/activity to be conducted. If necessary, mist structures with amended water and wipe clean. The HEPA vacuum is to remain in operation with the nozzle in the ceiling space for the remainder of the work activity.

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- Should the work/activity to be undertaken result in the disturbance of any Asbestos Containing Material (ACM), any ACM which becomes dislodged should be vacuumed and the associated area sprayed with amended water and wet wiped. If ACM is repaired to assure that the potential for any future fiber release is mitigated. For example, should the covering of the asbestos containing pipe insulation be ripped this area must be sealed with duct tape. If a sprayed-on fireproofing material has been scraped or otherwise marred the wound must be encapsulated.

- Once the work/activity is completed spray the upper surface of the adjacent ceiling structure with encapsulant and HEPA vacuum this surface one again. The hatch may then be sealed. The ladders or scaffold used is then HEPA vacuumed along with all tools used in the activity.

2) Drop Ceiling Panels

- HEPA vacuum surface of ceiling tile(s) to be removed and limited perimeter tiles.

- Carefully lift panel from grid with HEPA vacuum in close proximity and continuous use.

- The panel must be slid partially into the ceiling space to allow a worker to enter the ceiling space and HEPA vacuum the top of the tile being removed and tops of surrounding the adjacent structures. If deemed necessary mist these structures with amended water and wipe clean. The HEPA vacuum is to remain in operation with the nozzle in the ceiling space for the remainder of the work/activity.

- Should the work/activity to be undertaken result in the disturbance of any ACM, any which may become dislodged should be vacuumed and the associated area sprayed with amended water and wet wiped. If ACM is damaged by the work/activity, the damaged area should be repaired to assure that the potential for any future fiber release is mitigated. For example, should the covering of the asbestos containing pipe insulation be ripped this area must be sealed with duct tape. If a sprayed-on fireproofing material has been scraped or otherwise marred the wound must be encapsulated.

- Once the work/activity is completed spray the upper surface of the adjacent ceiling structure with encapsulant and HEPA vacuum this surface one again. The hatch may then be sealed. The ladders or scaffold used is then HEPA vacuumed along with all tools used in the activity.

3) Interlocking Ceiling Tiles

- Where possible, entrance into interlocking ceiling tiles should be at those locations where access buttons are present.

- When removing a tile which has access buttons, carefully loosen the tile with the HEPA vacuum in close proximity and continuous operation. Lower the tile slowly to permit HEPA vacuuming of the top surface of the tile.

- If tiles need to be cut for removal, score the tile with razor with the HEPA vacuum in close proximity and in continuous operation.

- Prior to the removal of any additional tiles, HEPA vacuum top surface of adjacent tiles and any other adjacent structures. If considered necessary, mist structures with amended water and wipe clean. The HEPA vacuum is to remain in operation with the nozzle in the ceiling space for the remainder of the work/activity.

- Should the work/activity to be undertaken result in the disturbance of any ACM, any which become dislodged should be vacuumed and the associated area sprayed with amended water and wet wiped. If ACM is damaged by the work/activity, the damaged area should be repaired to assure that the potential for any future fiber release is mitigated. For example, should the covering of asbestos containing pipe insulation be ripped this area must be sealed with duct tape. If a sprayed-on fireproofing material has been scraped or otherwise marred the wound must be encapsulated.

- Once the work/activity is completed, spray the upper surface of the adjacent ceiling structure with encapsulant and HEPA vacuum this surface once again. The tiles can then be replaced. The ladders or scaffold used is then HEPA vacuumed along with all tools used in the activity.

J. Under no circumstances should a ceiling space which is contaminated with asbestos containing material be left open. At minimum poly sheets be duct taped over any opening until the applicable ceiling material can be replaced.

K. Mist the floor poly, remove protective clothing and outer disposable suit while standing on the poly, and then fold the suits inside out and wrap poly for disposal in U.S. EPA/DOT approved waste bags. Respirators must be worn throughout this entire procedure.

L. HEPA vacuum the floor and surfaces within designated work site.

M. With a spray bottle containing plain water, gently mist facial areas and tyvek suit then remove suit and dispose of in U.S. EPA/DOT approved waste bag. Respirator may then be removed.